



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,721	02/11/2004	Thomas A. Osborne	8627-451	2837
7590 04/23/2009 Lawrence G. Almeda BRINKS HOFER GILSON & LIONE P.O. Box 10395 Chicago, IL 60610				
			EXAMINER SEVERSON, RYAN J	
			ART UNIT 3731	PAPER NUMBER
			MAIL DATE 04/23/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/776,721

**Applicant(s)**

OSBORNE, THOMAS A.

**Examiner**

Ryan J. Severson

**Art Unit**

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-3, 6, 8-16, 18-21, 24, 26-34, 36-39, 42, 44-52 and 54-60 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 39 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 6, 8-16, 18, 19, 56, 57 and 59 is/are allowed.
- 6) ☒ Claim(s) 20, 21, 24, 26-34, 36-38, 42, 44-52, 54, 55 and 60 is/are rejected.
- 7) ☒ Claim(s) 1 and 58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-813)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 January 2009 has been entered.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: In line 16 of claim 1, applicant claims, in part, "...and being secured to one of first curved portions." This appears to merely be a grammatical error, and should read "...and being secured to one of the first curved portions." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 20, 21, 24, 26-34, 36-38, 42, 44-52, 54, 55, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lefebvre (5,108,418) in view of Thomas (7,147,649).** Lefebvre discloses a filter comprising a plurality of primary struts (3) having the claimed curved configuration, the struts having anchoring hooks (6 and 7) at the distal ends and they are connected at a hub (4) at the proximal ends. However, Lefebvre does not disclose secondary struts connected to the primary struts. Attention is drawn to Thomas, who teaches secondary struts (22-1c' and 22-1c", see figure 3C) connected to the primary struts (see figure 1A) to help center and anchor the filter in the blood vessel. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included secondary struts on the primary struts of Lefebvre in the manner taught by Thomas to help center and anchor the filter in the blood vessel. The free ends of the secondary struts to not contact the primary struts, and there are two secondary struts (22-1c' and 22-1c") connected to each individual primary strut.
5. Regarding claims 20 and 38, the combination of Lefebvre and Thomas *as set forth above* does not disclose the secondary struts and the first curved portion having the same radius of curvature. Attention is drawn to figure 2B of Thomas, which teaches a filter can be made from round wire having a constant diameter (and therefore, constant radius) in the primary struts and secondary struts. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the filter of the combination as set forth in paragraph 4 above entirely of round wire having a constant diameter to make the filter easier to produce.

6. Regarding claims 29, 31, 33, 34, 47, 49, 51 and 52, the combination of Lefebvre and Thomas does not disclose the diameter of the primary and secondary struts, the filter expanded diameter, and the filter length. It would have been obvious to one having ordinary skill in the art at the time the invention was made to size the filter struts and length as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Regarding claims 30, 32, 48 and 50, Lefebvre further does not disclose the struts are superelastic. Attention is again drawn to Thomas, who teaches making filter struts superelastic (see column 5, lines 22-24) to make the struts extremely flexible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the filter struts of a superelastic material in the manner taught by Thomas to make the struts extremely flexible.

8. Regarding claims 27 and 45, Lefebvre further does not disclose a retrieval hook on the hub of the filter. Attention is again drawn to Thomas, who teaches a retrieval hook (16) disposed on a hub to allow the filter to be easily retrieved when it is no longer needed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a retrieval hook on the filter in the manner taught by Thomas to allow the filter to be easily retrieved when no longer needed.

9. Regarding claim 60, the combination as set forth in paragraph 5 above does not disclose the secondary struts are not unitarily formed. However, this limitation is a product-by-process limitation. It has been held that even though product-by-process

claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In the instant case, even if the secondary struts are not unitarily formed, they must be connected together when assembling the filter as a whole, resulting in the same final product as taught by the combination set forth above.

#### ***Allowable Subject Matter***

10. Claims 1, 2, 6, 8-16, 18, 19, 56, 57 and 59 are allowed.
11. Claim 58 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

12. Applicant's arguments with respect to claims 20 and 38 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J. Severson whose telephone number is (571) 272-3142. The examiner can normally be reached on Monday - Friday 8:30-5:00.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. J. S./  
Examiner, Art Unit 3731  
4/21/09

/Anhtuan T. Nguyen/  
Supervisory Patent Examiner, Art Unit 3731  
4/22/09